variables (age, marital status, education, employment, income, comorbidity), older age, widowhood, lower education, retirement, and comorbidity (Charlson > 2), were associated with lower QoL (all $p < 0.05$). In multivariate analyses, all patient-related variables explained 18–21% of the variance in scores. With the addition of disease-related variables (treatment with radical prostatectomy, radiation, or hormones; metastases, Gleason score at diagnosis), the model explained 21–25% of the variance. Patients currently on hormone treatment had lower PORPUS-Ui and HUI3 scores than patients treated with hormones in the past or never ($p < 0.05$). System-related variables (year and county of diagnosis) contributed little to the explained variance (1–3%). Symptom-related variables (PCI urinary, sexual, bowel function) were the strongest predictors of QOL (explaining 47–70% of the variance). **CONCLUSION:** Symptoms related to PC and its treatment have large effects on the QoL of PC survivors. Although many variables are associated with QoL, only prostate symptoms and comorbidity have independent effects.

PCN65

HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH STAGE III OR IV FOLLICULAR LYMPHOMA RECEIVING 90Y-IBRITUMOMAB TIUXETAN FOLLOWING FIRST-LINE CHEMOTHERAPY

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OBJECTIVE: A multicenter phase III trial showed patients with stage III or IV follicular lymphoma who achieved a partial or complete remission after first-line treatment receiving 90Y-ibritumomab tiuxetan had significantly longer PFS time as compared to similar patients receiving no treatment. The objective of this study was to determine the impact of 90Y-ibritumomab tiuxetan on health-related quality of life. **METHODS:** Health-related quality of life was assessed using EORTC QLQ-C30 version 2 and EuroQoL-5D (EQ-5D) questionnaires. These questionnaires were administered at screening, week 14 and every 6 months thereafter and finally at end of follow-up. Descriptive statistics were used to compare scores across treatment groups. The change in scores from baseline was also assessed by gender, age and first-line treatment. Mixed effects model was used to assess the factors that were associated with final scores of Visual Analogue Scale (VAS) of EQ-5D. **RESULTS:** No notable treatment differences were observed in the scores of EORTC QLQ-C30 (all domains) scores across timepoints or changes from baseline. This result was true for all sub-groups. The mean scores for EQ-5D at screening and final visit were 0.83 and 0.84 for 90Y-ibritumomab tiuxetan and 0.84 and 0.83 for control arm. The mean VAS scores at screening and final visit were 77.52 and 77.64 for 90Y-ibritumomab tiuxetan and 76.57 and 78.51 for control arm. An analysis of factors associated with final VAS scores showed that baseline VAS scores affected final VAS scores ($p < 0.0001$). **CONCLUSION:** There appears to be no difference in quality of life for patients on 90Y-ibritumomab tiuxetan as compared to those in control arm as measured by EORTC QLQ C-30 and EQ-5D questionnaires. 90Y-ibritumomab tiuxetan prolongs PFS without impacting the health-related quality of life of patients.

WITHDRAWN **PCN66**

WITHDRAWN **PCN67**

PCN68

HOUSEHOLD INCOME AS A PREDICTOR OF PSYCHOLOGICAL WELL-BEING AMONG LONG-TERM COLORECTAL CANCER SURVIVORS

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OBJECTIVE: To quantify the impact of disease and its treatment on patient-reported well-being, it is important to consider the patient's economic circumstances. This study explored the relationship between annual household income and health-related psychological well-being among insured, long-term (>five years) colorectal cancer (CRC) survivors with and without permanent intestinal stomas. **METHODS:** This is a secondary analysis of data collected as part of an NCI-funded study of health-related quality of life (HRQOL) among CRC survivors, in which 681 respondents (52% response rate) completed a survey instrument that included the modified City of Hope Quality of Life (mCOH-QOL)–Ostomy questionnaire, SF-36 v2, and socio-demographic items. Of these, 588 subjects provided income data and were included in this analysis. The mCOH-QOL–Ostomy is based on a four-dimension model of HRQOL (physical, psychological, social, and spiritual well-being). For this analysis, the dependent variable was the psychological well-being (PWB) score. Hierarchical linear regression was used to explore the unique contribution of income to the total variance of PWB over and above the model that included the following independent variables: self-reported physical health (SF-36v2 PCS), co-morbidity (Charlson-Deyo), age, sex, race/ethnicity, education, partnered status, and presence of an ostomy. **RESULTS:** After accounting for the proportion of variance in PWB explained by the other independent variables, the additional variance explained by income was significant (R^2 increased from 0.228 to 0.250; $p = 0.006$). When compared to those in the highest household income category (>$100,000), subjects in the lowest income category (<$5000) had a clinically meaningful 0.82 point lower PWB score on the 11-point scale. Significant positive predictors of PWB were PCS score, age, and absence of an ostomy. **CONCLUSION:** Although the study design does not allow causal inference, these results demonstrate a significant relationship between income and PWB that merits further consideration when attempting to interpret patient-reported outcomes, particularly HRQOL.

PCN69

QUALITY OF LIFE IMPACT OF HOT FLUSHES IN MEN RECEIVING TREATMENT FOR PROSTATE CANCER

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OBJECTIVE: To provide qualitative data on the men's experience, impact and relative importance of hot flushes as a result of prostate cancer therapies, with an emphasis on gonadotropin-releasing hormone (GnRH) agonists. **METHODS:** A qualitative study applying a non-probabilistic purposive sampling strategy. Participants were over 50 years old with histologically confirmed adenocarcinoma of the prostate, had recently initiated (≤6

months ago) and were receiving GnRH with or without anti-androgen, and had recent experience of hot flushes as a result of their therapy. A content and thematic analysis was conducted to identify themes and categories that centred on particular phrases, incidents and types of behaviour. **RESULTS:** Participants (n = 12) aged 58–82, diagnosed on average for 5 years, receiving GnRH agonists (100.0% Lupron, 40.0% Casodex, 20.0% Zometa) were interviewed. The first hot flush usually occurred within 2 weeks of GnRH treatment. Participants experienced widely differing hot flush event frequency and severity; from 8–10 events in 24 hours to one in 2–3 weeks. Events lasted 2 minutes to one hour, and occurred at different times. Analyses identified that hot flushes were most commonly described in terms of 'sweating', 'burning up', and 'perspiring'. Those who had more severe flushes also described 'dizziness', 'weakness', and 'nausea'. Participants found their hot flush experience generally distressing e.g. felt scared, anxious, annoyed, confused, irritated, worried. Hot flushes impacted men's lives e.g. sleep problems, needing to stop activities, resting, taking a cold shower. However, most considered the hot flush experience in the context of their overall condition, some reported getting used to the experience over time and adopting varies coping strategies. **CONCLUSION:** Hot flush descriptions reflect those previously reported in the literature, provide additional depth to the experience from the patient's perspective and will inform the development of health states for utility assessment.

PCN70

THE IMPACT OF HODGKIN'S LYMPHOMA ON HEALTH RELATED QUALITY OF LIFE

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OBJECTIVE: Hodgkin's lymphoma (HL) significantly impacts the health related Quality of Life (HRQoL) of patients. Treated patients often report increased stress, fatigue, nausea, sexual dysfunction, decreased social and emotional function, and vocational limitations; however few studies have assessed these domains. This review summarizes the impact of HL on hrQoL and recommends which HRQoL constructs should be assessed in the clinic and in clinical trials. **METHODS:** A systematic review of the literature was conducted in order to better understand the impact of HL and its treatments on HRQoL. The identified articles were reviewed for references to HRQoL and specific tools to assess these constructs. The major impacts of the disease and treatment effects are compared across tools assessing these domains. **RESULTS:** Some 30 published studies assessing hrQoL in patients with HL were identified. In these 30 articles over 20 instruments were used to assess HRQoL. The most common cancer-specific instruments employed were the EORTC QLQ-30 and various fatigue scales. No HL specific instrument was identified as being widely used. Tables summarizing the domains covered by each instrument are provided. The EORTC and FACT-Lym appear to provide the best coverage of relevant HRQoL domains, however, using more than one instrument is necessary to capture all relevant domains. **CONCLUSION:** Although HL significantly impacts HRQoL very few studies have collected this data in a comprehensive manner. This work reviews the literature on the HRQoL in patients with HL and provides insights regarding the key set of HRQoL constructs that should be assessed in the clinic and in clinical trials to best characterize the impact of HL and treatment. Although the FACT-Lym provides good coverage of HRQoL domains in HL, additional validation work is needed to ensure the reliability and validity of the tool in this population.

PCN71

SOCIETAL PREFERENCES (UTILITIES) FOR ADVANCED MELANOMA HEALTH STATES IN THE UNITED KINGDOM (UK) AND AUSTRALIA

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OBJECTIVE: To estimate general public preference-based utilities for standardized health states that include common responses and toxicities observed during treatment of advanced melanoma. **METHODS:** A cross-sectional study was used to elicit standard gamble utilities for melanoma in the UK and Australia. Health states included partial response (PR), stable disease (SD) and progressive disease (PD). Common grade I/II toxicities (occurring in >10% of patients) were abstracted from the literature for dacarbazine, temozolomide, interleukin-2, fotemustine, and interferon alpha2b. These may also apply for ipilumumab, a developmental immunotherapy. Health state descriptions were based on WHO response definitions, Common Toxicity Criteria for Adverse events v3, and feedback from five clinical experts and three quality-of-life researchers. **RESULTS:** Utilities were elicited from 110 participants in the UK (n = 64) and Australia (n = 56). Mean utilities estimated (for UK vs. Australian respondents) were as follows: PR (0.85 vs. 0.89); SD (0.77 vs. 0.80); PD (0.59 vs. 0.44); and best supportive care (0.59 vs. 0.44). Utility decrements associated with the toxicities were: hair loss (–0.03); skin reaction (–0.03 vs. –0.08); diarrhea (–0.06 vs. 0.12); toxicity, but indication that treatment may be working (–0.06 vs. –0.08); nausea/vomiting (–0.07 vs. –0.13); flu-like syndrome (–0.09 vs. –0.13); stomatitis (–0.10 vs. –0.15); 1-day out/inpatient care for grade 3/4 toxicity (–0.11 vs. –0.15); symptomatic melanoma (–0.11 vs. –0.22); and hospitalization for grade 3/4 toxicity (–0.13 vs. –0.22). **CONCLUSION:** The development process for these standardized health states for advanced melanoma can serve as a model for developing disease-specific health states that incorporate both intended treatment responses and adverse events. PR and SD are preferred, and symptomatic melanoma and hospitalization for toxicity yield the highest disutilities. The method of decrementing utility values by subtracting toxicity utility weights holds promise for assigning utilities to serious diseases treated with toxic therapies.

PCN72

DISABILITY AND HEALTH-RELATED QUALITY OF LIFE IN LONG-TERM SURVIVORS OF CANCER IN CHILDHOOD IN BRAZIL: AN ASSESSMENT OF THE CONSTRUCT VALIDITY OF THE HEALTH UTILITIES INDEX (HUI3)

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OBJECTIVE: There is limited experience with patient-reported health status and health-related quality of life (HRQL) in survivors of cancer in childhood in low-income countries. The purpose of this study was to collect these measurements in Brazil, test hypotheses about differences among diagnostic groups, and compare the results with those from other countries in an overall assessment of the construct validity of the HUI3. **METHODS:** Survivors were eligible if: diagnosed with cancer in childhood; attending the long-term follow-up clinic for one treatment center; at least 8 years off therapy; cancer free, literate; and at least 13 years of age. Health status measurements were collected in